INTSO EDUCATION

MATHEMATICS TALENT SEARCH OLYMPIAD(MTSO) 2019 - 2020

STAGE - 1   **TIME** : 60 min.

CLASS : IV   **Max. Marks** : 50

Instructions:
⇨ *Fill the OMR sheet completely and carefully.*
⇨ *Each question carries one mark and has only one correct answer.*
⇨ *The question paper contains 50 questions to be answered in 60 minutes.*

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1. The difference between the place values of '8' and '4' in 78045 is   [   ]
    1) 7690   2) 7960   3) 7900   4) 7000

2. The descending order of 9411, 9145, 9015, 9149 is   [   ]
    1) 9411, 9145 , 9149, 9015   2) 9411, 9149, 9145, 9015
    3) 9145, 9149, 9411, 9015   4) 9411, 9015, 9145, 9149

3. Fifty six thousand four hundred fifty is same as   [   ]
    1) 56440   2) 56450   3) 56504   4) 45650

4. Round off 34519 to the nearest thousands   [   ]
    1) 34500   2) 35000   3) 34510   4) 30000

5. Among the following, is same as 8403   [   ]
    1) 800 + 40 + 3   2) 8 + 4 + 0 + 3   3) 8000 + 40 + 3   4) 8000 + 400 + 3

6. If there are 25, 632 seats in stadium P, 30, 654 seats in stadium Q and 15, 620 seats in stadium R, then in which stadium the number of seats were least   [   ]
    1) P   2) Q   3) R   4) both P and Q

7. Mohit was solving a mathematics question. he calculated that there are eighty six thousand four hundred seconds in a day. Help him to write this number in numeral form ?   [   ]
    1) 80084   2) 80640   3) 86400   4) 86404

8. The numarater of a fraction is four less than the denominator if 1 is added to both its numerator and denominator it becomes $\frac{1}{2}$, then the fraction is   [   ]

    1) $\frac{4}{8}$ 2) $\frac{3}{7}$ 3) $\frac{2}{6}$ 4) $\frac{15}{19}$

9. Among the following, is NOT true   [   ]
    1) $12 \times 89 = 89 \times 12$ 2) $12 \times 89 = 12 \times (80 + 9)$
    3) $12 \times 89 = (10 + 2) \times 89$ 4) $12 \times 89 = (12 \times 8) + (12 \times 9)$

10. A number is multiplied by $2\frac{1}{3}$ times it self and then 61 is subtracted from the product obtained. If final result is 9200. Then the number is   [   ]
    1) 36   2) 63   3) 67   4) 37

11. Product of the third multiple of 4 and 9 is   [   ]
    1) 18   2) 108   3) 54   4) 216

12. Priyanka read a book of 252 pages in a week. She read same number of pages each day. How many pages did she read each day ? [   ]
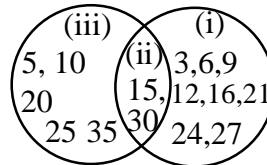   1) 42　　　　　　　2) 32　　　　　　　3) 34　　　　　　　4) 36

13. A company paid 86886 as airfare for 18 tickets to travel from New Delhi to Chennai. What was the fare of one ticket ? [   ]
    1) 4800　　　　　　2) 4892　　　　　　3) 5287　　　　　　4) 4827

14. The numbers in region (ii) shows that the number can be divided by .... both [   ]

    1) 5 and 3

    2) 15 and 9

    3) 20 and 9

    4) 5 and 20

    (iii) 5, 10 20 25 35　(ii) 15, 30　(i) 3,6,9 12,16,21 24,27

15. Select the correct match [   ]
    1) XIV + XXXVI = 66　　　　　　2) XX – XVIII = 3
    3) XXXV + XXIX = 64　　　　　　4) LX – XXXIX = 23

16. On friday Arjun drove 2432km, on Saturday he drove 820km and on Sunday he drove 429km. Approximately, how many kms did he drive in the three days ? [   ]
    1) 3861km　　　　2) 3681 km　　　　3) 3581km　　　　4) 3426km

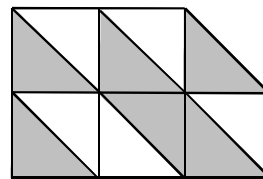17. By how much is $\dfrac{19}{20}$ greater than $\dfrac{7}{20}$? [   ]

    1) $\dfrac{4}{5}$　　　　2) $\dfrac{7}{5}$　　　　3) $\dfrac{6}{5}$　　　　4) $\dfrac{5}{6}$

18. Among the following, set of fractions are arranged in descending order ? [   ]

    1) $\dfrac{3}{6},\dfrac{5}{6},\dfrac{7}{6},\dfrac{9}{6},\dfrac{11}{6}$
    2) $\dfrac{9}{7},\dfrac{5}{7},\dfrac{4}{7},\dfrac{6}{7},\dfrac{3}{7}$
    3) $\dfrac{18}{19},\dfrac{11}{19},\dfrac{7}{19},\dfrac{6}{19},\dfrac{5}{19}$
    4) $\dfrac{9}{8},\dfrac{4}{8},\dfrac{6}{8},\dfrac{12}{8},\dfrac{14}{8}$

19. What fraction of the given figure is unshaded ? [   ]

    1) $\dfrac{12}{8}$　　　　2) $\dfrac{3}{10}$

    3) $\dfrac{5}{10}$　　　　4) $\dfrac{4}{10}$

20. Sonal bought 9 eggs out of which 6 are bad. What fraction of eggs are good ? [   ]

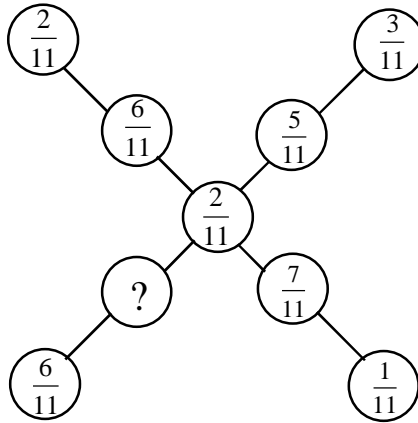   1) $\dfrac{1}{9}$　　　　2) $\dfrac{2}{3}$　　　　3) $\dfrac{1}{3}$　　　　4) $\dfrac{1}{6}$

21. Which number should come in place of '?' so that sum of each arm is same [   ]

1) $\dfrac{6}{11}$

2) $\dfrac{2}{11}$

3) $\dfrac{9}{11}$

4) $\dfrac{3}{11}$

22. How many 500 g sugar packets are required to make 4 kg ? [   ]
1) 8   2) 4   3) 3   4) 6

23. If cost of 1kg grapes is ₹80. Then the cost of 250g grapes is [   ]
1) ₹30   2) ₹20   3) ₹40   4) ₹100

24. Mini took 14 mins 8 secs to walk from her home to school. On her way back home, she took another route and reached home in 12 mins 44 secs. How much time did she save by takig the shorter route ? [   ]
1) 1 min 2 secs   2) 82 secs   3) 1 min 24 secs   4) both 2 and 3

25. Mr. Gupta travelled 75km 800m by car and 1800km 40m by air.Then the total distance tracvelled by Mr. Gupta is [   ]
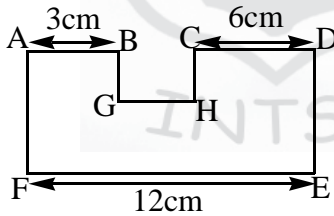1) 1875km 840m   2) 1675km   3) 175800km   4) 255840km

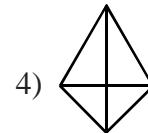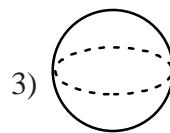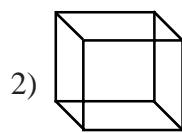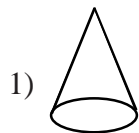26. In given figure the length of GH is [   ]

1) 6cm

2) 3cm

3) 9cm

4) 2cm

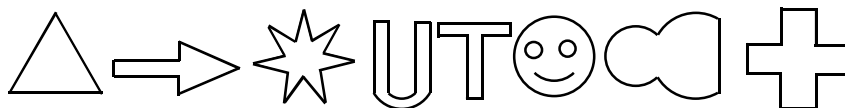27. Among the following, figures consists of exactly 6 faces ? [   ]

1)   2)   3)   4)

28. How many of the following figures are symmetrical ? [   ]

1) 5   2) 7   3) 8   4) 6
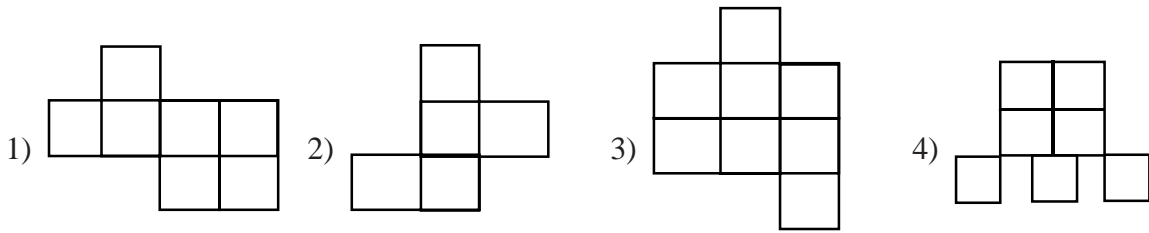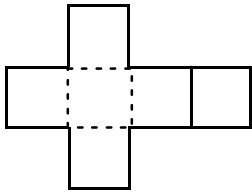
29. Among the following figures have a line of symmetry is   [   ]

1)   2)   3)   4)

30. Varun made a shape by folding the given cardboard along dotted lines.
Which shape did Varun make ?

1)   2)   3)   4)

31. Identify the number which is different from other   [   ]
1) 53   2) 63   3) 43   4) 73

32. There are deers and peacocks in a zoo. by counting their heads they are 80. The number of legs is 200. How many peacocks are there   [   ]
1) 20   2) 30   3) 50   4) 60

33. Sum of all the numbers that are factors of 30 but are not factors of 18   [   ]
1) 30   2) 60   3) 80   4) 70

34. The difference between 0.4 of 500 and $\frac{3}{10}$ of 90 is   [   ]

1) 395   2) 256   3) 450   4) 373

35. Among the following, has the smallest value   [   ]

1) $\frac{3}{5} \times 3$ 2) $2 - 0.399$ 3) $2\frac{1}{20} + 0.87$ 4) $13 \div 8$

36. The number 897159388p is divisible by 4. The unknown non zero digit marked P will be
                    [   ]
1) 2   2) 3   3) 4   4) 6

37. The sum of all the prime factors of 't' is 5. Identify by a possible value of 't'.   [   ]
1) 36   2) 30   3) 20   4) 26

38. If 42 is the lowest common multiple of 3 and k, then the value of k – 3 is   [   ]
1) 39   2) 17   3) 14   4) 11

39. Using the digits 1, 4, 6 and 8 each only once how many four digited odd numbers can be formed
                    [   ]
1) 4   2) 5   3) 3   4) 6

40. A shirt cost was ₹28.50 and Ramu gets discount ₹2.35 for each shirt. How much does he have to pay for dozen shirts. [   ]
    1) ₹302.60   2) ₹310.80   3) ₹312.50   4) ₹313.80

41. In a plantation there are 12 rows of mango trees. If in each row there is 10 trees. How many mango trees are there in the plantation ? [   ]
    1) 120   2) 22   3) 32   4) 240

42. Rani's age is 9 years. Her mothers age is thrice her age. What is Rani's mother age? [   ]
    1) 9 years   2) 18 years   3) 27 years   4) 12 years

43. The weight of one bag of rice is 50 kgs. How much do 17, such bags weight in all ? [   ]
    1) 67kgs   2) 850 kgs   3) 750kgs   4) 950 kgs

44. A machine wraps 235 boxes of toys in an hour. How many boxes of toys can it wrap in 4 hours ? [   ]
    1) 840   2) 740   3) 950   4) 940

45. 8 people can sit safely in a jeep at one time. If 48 people need to be taken from a village to a fair, then how many such jeeps are required ? [   ]
    1) 8   2) 7   3) 9   4) 6

46. If 74 apples are packed equally in 9 boxes. Then how many apples will be there in each box? How many apples will remain unpacked ? [   ]
    1) 8,2   2) 9,3   3) 8, 3   4) 9, 4

47. When I am multiplied by 9, the product is 729. Who am I ? [   ]
    1) 71   2) 72   3) 81   4) 91

48. A water tank holds 500 liters of water. How many water cans of 22 litres capacity can be filled with water ? How many liters of water will be left in the tank [   ]
    1) 22, 16   2) 23, 17   3) 21, 16   4) 23, 16

49. How many three digit numbers are there in all [   ]
    1) 899   2) 100   3) 900   4) 999

50. On the occassion deepavali festival each student of a class sends greeting cards to the others. If there are 20 students in the class, then the total number of greeting cards exchanged by the students is [   ]
    1) 380   2) 190   3) 180   4) 40